IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.(Currently Amended) An illumination system, comprising a radiation source and a fluorescent material comprising at least one phosphor capable of absorbing a part of light emitted by the radiation source and emitting light of wavelength different from that of the absorbed light; wherein said at least one phosphor is an oxido-nitrido-silicate of general formula

 $EA_{2..}Si_{3..a}B_aN_{3..a}O_a: Ln_z$, wherein 0 < z \leq 1 and 0 < a < $\frac{5}{7}$, comprising at least one element EA selected from the group consisting of Mg, Ca, Sr, Ba and Zn and at least one element B selected from the group consisting of Al, Ga and In, and being activated by a lanthanide selected from the group consisting of cerium, europium, terbium, praseodymium and mixtures thereof.

 (Currently Amended) An illumination system according to claim 1.

wherein the fluorescent material comprises a red phosphor of-of-having a general formula of $EA_{2-z}Si_{5-a}B_aN_{8-a}O_a$: Lm_z , wherein $0 < z \le 1$ and 0 < a < 5 and a green or yellow phosphor.

3.(Currently Amended) An illumination system according to claim 1,

 $\label{eq:continuous} \text{wherein the-\underline{a} green or yellow phosphor is selected from }$ the group of

 $\label{eq:ms:eu} MS\!:\!Eu,Ce,Cu \ comprising \ at \ least \ one \ element \ selected \ from$ the group M = Mg, Ca, Sr, and Zn;

 MN_2S_4 :Eu,Ce comprising of at least one element selected from the group M = Mg, Ca, Sr, and Zn at least one element selected from the group N = Al, Ga, In, Y, La, Gd,

 $(Re_{1-r}Sm_r)_3(Al_{1-s}Gas)_5O_{12}:Ce, \ where \ 0 \le r < 1 \ and \ 0 \le s \le 1 \ and$ Re selected from Y, Lu, Sc, La and Gd

and $(Ba_{1-x-y-z}Sr_xCa_y)_2SiO_4$: Eu_z , wherein $0 \le x \le 1$, $0 \le \le 1$ and $0 \le z \le 1$.

- 4. (Withdrawn) An illumination system according to claim 1, wherein the radiation source is a UV- or blue-emitting LED.
- 5.(Currently Amended) An illumination system according to claim 1.

wherein said radiation source comprises a nitride compound semiconductor represented by the general formula $In_iGa_jAl_kN, \text{ where } 0\leq i\leq 1, \ 0\leq j\leq 1, \ 0\leq k\leq 1 \text{ and } \underline{i+j+k=1}\underline{i+j+k=1}.$

- 6.(Withdrawn) An illumination system according to claim 1, wherein the system is a lamp.
- 7.(Original) An illumination system according to claim 1, wherein the system is a traffic sign.
- 8.(Withdrawn-Currently Amended) A phosphor capable of absorbing a part of light emitted by the radiation source and emitting light of wavelength different from that of the absorbed light; wherein said at least one phosphor is an oxido-nitrido-

Amendment in Reply to Office Action of December 13, 2007

silicate of general formula

 $EA_{2-2}Si_{3-2}B_aN_{3-2}O_a: Ln_z, \text{ wherein } 0 < z \leq 1 \text{ and } 0 < a < \frac{5\pi}{2} - \frac{5}{2}$ comprising at least one element EA selected from the group consisting of Mg, Ca, Sr, Ba and Zn and at least one element B selected from the group consisting of Al, Ga and In, and being activated with a lanthanide selected from the group consisting of cerium, europium, terbium and mixtures thereof.

- 9. (Withdrawn) A phosphor according to claim 8, of general formula $(Sr_{1-x}EA_x)_{2-z}Si_{5-z}(Al_{1-b}B_b)_sN_{3-z}O_a$: $(Eu,Ce)_z$, wherein $0 \le x \le 1$ and $0 \le b \le 1$.
- 10.(Withdrawn) A phosphor according to claim 8,of general formula

$$\left(\text{Sr}_{1-x-y}\text{Ba}_{x}\text{Ca}_{y}\right)_{2-z}\text{Si}_{5-a}\text{Al}_{a}\text{N}_{8-a}\text{O}_{a}\colon\left(\text{Eu},\text{Ce}\right)_{z}\text{ wherein }0{\leq}y{\leq}1\text{.}$$

11.(Withdrawn-Currently Amended) A phosphor according to claim 8

of general formula

- 12. (Withdrawn) A phosphor according to claim 8, wherein silicon is substituted by germanium.
- 13.(New) An illumination system comprising a radiation source and a fluorescent material comprising at least one phosphor capable of absorbing a part of light emitted by the radiation source and emitting light of wavelength different from that of the absorbed light; wherein said at least one phosphor is an oxido-nitrido-silicate of general formula

EA_{2-z}Si_{5-a}B_aN_{8-a}O_a:Ln_z, wherein 0 < z ≤ 1 and 0 < a < 5

comprising at least one element EA selected from a group of Mg

and Zn and at least one element B selected from a group of Ga and

In, and being activated by a lanthanide selected from a group of

cerium, terbium, praseodymium and mixtures thereof.

14.(New) The illumination system of claim 13, wherein the at least one element EA may be further selected from a group of Ca, Sr and Ba and the at least one element B may be Al, and being activated by a lanthanide selected from a group of europium.

- 15.(New) The illumination system of claim 13, wherein the fluorescent material comprises a red phosphor having a general formula of $EA_{2-2}Si_{5-a}B_aN_{5-a}O_a:Ln_2$, wherein $0 < z \le 1$ and 0 < a < 5 and a green or yellow phosphor.
- 16.(New) The illumination system of claim 15, wherein the green or yellow phosphor is selected from the group of

 $\label{eq:ms:eu} MS\!:\!Eu,Ce,Cu \mbox{ comprising at least one element selected from}$ a group M = Mg, Ca, Sr, and Zn;

 MN_2S_4 : Eu,Ce comprising of at least one element selected from a group M = Mg, Ca, Sr, and Zn at least one element selected from a group N = Al, Ga, In, Y, La, Gd,

 $(Re_{1-s}Sm_r)_3(Al_{1-s}Gas)_5O_{12}:Ce, \ where \ 0 \le r <1 \ and \ 0 \le s \le 1 \ and$ Re selected from Y, Lu, Sc, La and Gd,

 $\mbox{and } (Ba_{1\cdot x\cdot y\cdot x}Sr_xCa_y)\,_2SiO_4\!:\!Eu_z\,, \mbox{ wherein }0\!\!<\!x\!\!\leq\!\!1,\ 0\!\!\leq\!\!\leq\!\!1 \mbox{ and }0\!\!<\!\!z\!\!<\!\!1.$

17.(New) The illumination system of claim 13, wherein the radiation source comprises a nitride compound semiconductor

represented by the general formula $\text{In}_i Ga_j Al_k N$, where $0 \le i \le 1$, $0 \le j \le 1$, $0 \le k \le 1$ and i + j + k = 1.

18.(New) The illumination system of claim 13, wherein the system is a traffic sign.